In looking over a small collection of Cryptogamous plants recently gathered in the island of Tahiti by Dr. Sibbald and sent by him to Professor Balfour, I found two specimens (only two, alas!) of a moss which a single glance convinced me must belong to the genus *Spiridens*; and the capsules being in a perfect state enabled me to determine this at once in the most satisfactory manner. The resemblance which it bears in general character to *S. Reinwardtii* is so marked, that at first it seemed doubtful whether it might not be a mere variety, but a more careful inspection rendered the specific distinctions quite apparent. The new species is a smaller and more slender plant, six to nine inches long or more, the leaves scarcely more than half the size, the capsules more cylindrical and the subulate termination of the operculum considerably longer and finer. It is under the microscope, however, that the most characteristic features are perceived to exist in the leaves; the margin of which in *S. Reinwardtii* is distinguished by a broad flat border closely and sharply toothed; in the new species by a very narrow thickened border remotely toothed. Without entering into a minute description, uncalled for in so brief a notice, the following specific characters may be assigned to the two mosses:—

S. Reinwardtii (Nees); foliis late marginatis, acute dentatis; dentibus approximatis; capsulis ovato-oblongis.

S. Balfouriana (nob.); foliis anguste marginatis, remote dentatis; capsulis ovato-cylindraceis.

This beautiful species of one of the finest genera in the family I have sincere pleasure in naming after my highly esteemed friend Dr. Balfour, Professor of Botany in the University of Edinburgh.

EXPLANATION OF PLATE XVII.

Fig. 1. *S. Balfouriana*, nat. size.
Fig. 2. Leaf.
Fig. 3. Margin of the leaf of *S. Reinwardtii*.
Fig. 4. Ditto of that of *S. Balfouriana*.
Fig. 5. Perichætial leaves and capsule.
Fig. 6. Peristome.—Figs. 2–6 all magnified.

XXXV.—*Notice of two new species of Ferns belonging to the genera* Oleandra *and* Polypodium. By R. K. Greville, LL.D. &c.*

[With a Plate.]

The genus *Oleandra* of Cavanilles, adopted by Presl and now generally received for a section of the old genus *Aspidium*, is one of the most natural in habit of the family of Ferns, and not less beautiful than well-defined. It is at the same time so limited in extent that the addition of a new species becomes a subject of considerable interest. The recorded species are *Oleandra nodosa* (*Aspidium nodosum,* Willd.), native of the islands of the West Indies; *O. articulata* (*Aspidium articulatum,* Sw.), found in the Mauritius; *O. neriiformis* (*Aspidium neriiforme,* Sw.), growing in the Philippine Islands and the East Indies; *O. Wallichii* (*Aspidium Wallichii,* Hook.), confined to Nepal; and *O. pilosa,* Hook., brought by Sir Robert Schomburgk from British Guiana. The last-named species, which is figured by the author in his beautiful 'Genera Filicum,' tab. 45, is most allied to the fern I have now the pleasure of laying before the Botanical Society. The latter was recently communicated to Professor Balfour from Tahiti, where it was collected by Dr. Sibbald, a gentleman, who, under all the disadvantages arising from the confusion which existed in that unhappy island, during the time of his visit, made some botanical discoveries of great interest; and I feel no small satisfaction in dedicating to him this very fine fern.

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* Read before the Botanical Society of Edinburgh, March 9, 1848.

The character of the Hookerian species with which it has to be contrasted is as follows:—

O. pilosa (Hook.); stipite ad basin articulato, fronde subtus pubescenti-hirsuta, indusiis longe ciliatis.—*Hook. l. c.*

Dr. Sibbald's fern may be thus defined:—

O. Sibbaldii (nob.); stipite ad medium articulato, fronde utrinque pubescenti-hirsuta, indusiis integerrimis.

The frond is about eighteen inches long, membranaceous, linear-lanceolate like all its congeners, but more or less gradually attenuated below, and in this respect differing much from *O. pilosa*; both surfaces are pubescent, the margin especially, fringed with hairs; beneath, the midrib is set with long chaffy scales. The arrangement of the sori, although not so regular as in *O. neriiformis,* is much more so than in *O. pilosa,* forming a more or less undulating line on each side, at from two to four lines distance from the midrib. I could have wished that the indusium had been in a younger state, nevertheless the organ is quite entire, and there is not the slightest trace of ciliation.

Another fern in the same collection, discovered in Raiatea, of which there exists only one specimen, appears like the former to be undescribed, and to possess considerable interest from its ambiguous appearance. With a general form of frond bearing a close resemblance to *Blechnum Spicant,* it has the sori of a *Grammitis*; and totally unlike as it is in habit to any *Grammitis* with which I am acquainted, I do not see how it can be placed in any other genus.

Grammitis blechnoides (nob.); fronde coriacea, utrinque attenuata, profunde pinnatifida, soris lineari-oblongis, subobliquis, numerosis.

Fronds numerous, from a creeping rhizoma which is densely covered with pale reddish brown scales, lanceolate, coriaceous, glabrous, seven to nine inches high, attenuated at each extremity, pinnatifid almost if not quite to the rachis, the segments alternate, entire, linear, obtuse, about half an inch long in the widest part of the frond, diminishing gradually in size below until they disappear a few lines from the rhizoma. Veins simple, internal. Sori oblong or linear-oblong, slightly oblique, arranged in a line on each side between the midrib and the margin, somewhat sunk in the thick substance of the frond.

EXPLANATION OF PLATE XVIII.

Fig. 1. *Grammitis blechnoides*, natural size.
Fig. 2. One of the segments, a portion of its substance removed to show the venation.
Fig. 3. Sori.
Fig. 4. Capsules.
Fig. 5. Seeds.—Figs. 2–5 magnified.

XXXVI.—*Descriptions of* Aphides. By Francis Walker, F.L.S.

[Continued from p. 260.]

Fourth Group.

The chief peculiarity of the only species in this group is the abundance of cottony filaments which emanate from its body, and it resembles the preceding *Aphis* in the shortness of its nectaries and of the seventh joint of its feelers.

6. *Aphis Fagi*, Linn.

Aphis Fagi, Linn. Syst. Nat. ii. 735. 23; Faun. Suec. 994; Geoff. Ins. i. 497. 12; Réaum. Ins. iii. t. 26. f. 1; Fabr. Ent. Syst. iv. 214. 24; Syst. Rhyn. 297. 24; Burm. Handb. der Ent. ii. 92. 2.

Lachnus Fagi, Kalt. Mon. Pflan. i. 147. 1.

The viviparous wingless female. This appears on *Fagus sylvatica*, the beech, before the end of April; as soon as it is hatched from the egg it resorts to the veins of the young leaves, and is then pale green or yellow, very small, long, narrow, slightly convex, nearly linear, or somewhat increasing in breadth towards the tip of the abdomen; its sides are covered with white filaments: the feelers are filiform or slightly setaceous, dark green, paler at